

(FILE 'HOME' ENTERED AT 14:12:17 ON 30 SEP 2000)

FILE 'CAPLUS' ENTERED AT 14:12:31 ON 30 SEP 2000

=> s metallocene#

L1 9020 METALLOCENE#

=> s l1 and metal halide adduct

1078587 METAL
 108068 HALIDE
 58854 ADDUCT
 11 METAL HALIDE ADDUCT
 (METAL(W)HALIDE(W)ADDUCT)

L2 0 L1 AND METAL HALIDE ADDUCT

=> s l1 and titanium tetrachloride adduct

293717 TITANIUM
 44379 TETRACHLORIDE
 58854 ADDUCT
 11 TITANIUM TETRACHLORIDE ADDUCT
 (TITANIUM(W)TETRACHLORIDE(W)ADDUCT)

L3 0 L1 AND TITANIUM TETRACHLORIDE ADDUCT

=> s titanium tetrachloride adduct

293717 TITANIUM
 44379 TETRACHLORIDE
 58854 ADDUCT
 L4 11 TITANIUM TETRACHLORIDE ADDUCT
 (TITANIUM(W)TETRACHLORIDE(W)ADDUCT)

=> d 1-11 bib abs

L4 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2000 ACS

AN 2000:578349 CAPLUS

TI Ring opening metathesis polymerization of dicyclopentadiene catalyzed by titanium tetrachloride adduct complexes with nitrogen-containing ligands

AU Doно, Keleypette; Huang, Jiling; Ma, Haiyan; Qian, Yanlong

CS Laboratory of Organometallic Chemistry, East China University of Science and Technology, Shanghai, 200237, Peop. Rep. China

SO J. Appl. Polym. Sci. (2000), 77(14), 3247-3251
 CODEN: JAPNAB; ISSN: 0021-8995

PB John Wiley & Sons, Inc.

DT Journal

LA English

AB Ring opening metathesis polymn. (ROMP) of dicyclopentadiene (DCPD) catalyzed by titanium tetrachloride adduct complexes such as $TiCl_4 \cdot nH_2O \cdot 2L$ [L = pyridine (1), 2-methylpyridine (2),

2,4,6-trimethylpyridine (3), 3-aminopyridine (4), 2-hydroxypyridine (5)] and CH_3Li as cocatalyst was reported. The polymer was characterized by

IR and 1H -NMR methods. Five influencing factors were also discussed. The catalyst systems $TiCl_4 \cdot nH_2O \cdot 2L/CH_3Li$ (L = 2-methylpyridine, 2,4,6-trimethylpyridine) appeared to be very active for the ROMP of DCPD.

RE.CNT 24

RE

(1) Bouterfa, D; *J Mol Catal* 1991, V69, P157 CAPLUS
 (2) Breslow, D; *Prog Polymer Sci* 1993, V18, P1141 CAPLUS
 (3) Cannizzo, L; *Macromolecules* 1988, V21, P1961 CAPLUS
 (6) Gilliom, L; *J Am Chem Soc* 1986, V108, P733 CAPLUS
 (9) Larroche, C; *J Org Chem* 1982, V47, P2019 CAPLUS
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2000 ACS
 AN 1999:706977 CAPLUS
 DN 132:36120
 TI Ring opening metathesis polymerization of dicyclopentadiene catalyzed by titanium tetrachloride adduct complexes containing nitrogen or oxygen ligand
 AU Keleypette, Dono; Huang, Jiling; Ma, Haiyan; Qian, Yanlong
 CS Laboratory of Organometallic Chemistry, ECUST, Shanghai, 200237, Peop. Rep. China
 SO Huadong Ligong Daxue Xuebao (1999), 25(4), 427-430
 CODEN: HLIXEV; ISSN: 1006-3080
 PB Huadong Ligong Daxue Xuebao Bianjibu
 DT Journal
 LA Chinese
 AB The ring opening metathesis polymn. of dicyclopentadiene (DCPD) catalyzed by $TiCl_4 \cdot C_6H_8O$, $TiCl_4 \cdot C_8H_11N$, $TiCl_4 \cdot O(CH_2)_4CH_2$, $TiCl_4 \cdot C_6H_7N$, $TiCl_4 \cdot C_5H_5N$, and $TiCl_4 \cdot C_4H_8O_2$ (6) is reported. These catalysis appear to exhibit good catalytic activity in the polymn. reaction. After a detailed investigation of some influencing parameters, the optimized reaction conditions were obtained.

L4 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2000 ACS
 AN 1997:792646 CAPLUS
 DN 128:120183
 TI Thermochemical parameters of formation of titanium tetrachloride adducts as a measure of donor-acceptor bond strength
 AU Sevast'yanova, T. N.; Suvorov, A. V.
 CS St. Petersburg State University, St. Petersburg, 199164, Russia
 SO Russ. J. Coord. Chem. (Transl. of Koord. Khim.) (1997), 23(11), 761-770
 CODEN: RJCCEY; ISSN: 1070-3284
 PB MAIK Nauka/Interperiodica Publishing
 DT Journal; General Review
 LA English
 AB A review and discussion with 77 refs. The mol. complexes (adducts) of titanium tetrachloride with mono- and bidentate donors are considered, and the enthalpies of their formation from the components dissolved in nonaq. solvents are compared with those of the corresponding cryst. complexes formed from the gaseous components. The enthalpy of formation of the cryst. complexes is shown to be strongly influenced by the intermol. interactions in the condensed state. It is established exptl. that the transition of the titanium tetrachloride complexes with acetonitrile, pyridine, and 2,2'-bipyridine to vapor has a dissociative character. Pyridine and 2,2'-bipyridine firmly hold titanium tetrachloride in the crystal state. The thermal effect of the reactions in nonaq. solvents is suggested to serve as a measure of the donor-acceptor interaction.

L4 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2000 ACS
 AN 1994:31305 CAPLUS
 DN 120:31305
 TI Magnesium-ethoxide-based titanium catalysts for polymerization of propylene
 AU Gupta, V. K.; Satish, S.; Bhardwaj, I. S.
 CS Res. Cent., Indian Petrochem. Corp. Ltd., Vadodara, 391346, India
 SO J. Macromol. Sci., Pure Appl. Chem. (1994), A31(4), 451-63
 CODEN: JSPCE6; ISSN: 1060-1325
 DT Journal
 LA English
 AB Supported titanium catalysts are prep'd. by the reactions of magnesium ethoxide and excess titanium tetrachloride with or without an internal Lewis base, di-Bu phthalate. The catalysts are characterized by compositional anal. and BET surface area measurements. The performance of

catalysts using triethylaluminum and dimethoxydiphenylsilane as the cocatalyst system are exmd. for propylene polymn. in slurry reactions. The di-Bu phthalate and phenyl-substituted methoxysilane used as internal and external Lewis bases, resp., govern the activity and stereospecificity

of the catalyst system. Such polymn. parameters as time, temp., and hydrogen concn. also influence the performance of the catalytic system in terms of yield, isotactic index, and melt flow index of the polypropylene.

L4 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2000 ACS
AN 1991:596789 CAPLUS

DN 115:196789

TI Titanium tetrachloride adduct with
p-nitrosodiphenylamine

AU Kogan, L. M.; Kuz'min, S. V.; Krol, V. A.; Shul'diner, M. D.

CS Vses. Nauchno-Issled. Inst. Sint. Kauch, USSR

SO Koord. Khim. (1991), 17(7), 914-17

CODEN: KOKHDC; ISSN: 0132-344X

DT Journal

LA Russian

AB The insertion reaction of p-nitrosodiphenylamine (L) in a 1:1 ratio gave $TiCl_3[N+(O-)(Cl)C_6H_4-p-NHPh]$ (I). $TiCl_4.nL$ ($n = 2, 3$) and $TiCl_4.Q$ ($Q = Ph_2NH$, N,N-diethylnitrosoaniline) were prep'd. Paramagnetic I was characterized by electronic, IR, ESR, and mass spectra.

L4 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2000 ACS
AN 1987:178386 CAPLUS

DN 106:178386

TI Titanium-glycol crosslinking agents for polygalactomannans

IN Morgan, Michael E.

PA Celanese Corp., USA

SO Eur. Pat. Appl., 17 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 205335	A2	19861217	EP 1986-304399	19860610
	EP 205335	A3	19870506		
	R: BE, CH, DE, FR, GB, IT, LI, NL, SE				
	US 4605736	A	19860812	US 1985-743246	19850611
	US 4677201	A	19870630	US 1986-830823	19860219

PRAI US 1985-743246 19850611

US 1986-830823 19860219

AB Aq. polygalactomannans crosslinked by reaction products of $TiCl_4$ with water-sol. alcs. or diols are useful in fracturing solns. for secondary oil recovery and in gel explosives. Adding 100 parts $TiCl_4$ over 1 h to 400 parts $HOCH_2CH_2OH$, cooling to 40.degree., adding 124 parts 50% NaOH over 10 min, and heating 1 h at 60.degree. gave a crosslinking compn. A soln. (viscosity 30-35 cP) of 40 lb hydroxypropyl guar gum in 1000 gal 2% aq. KCl was adjusted to pH 4.2 with ACOH and stirred with 2.6 gal crosslinker soln. to give a crosslinked polygalactomannan soln. with viscosity (130.degree.) 268, 428, and 580 cP after 0, 30, and 60 min, resp.

L4 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2000 ACS
AN 1979:24159 CAPLUS

DN 90:24159

TI Metal halide-amide reaction product

IN Bulson, Walter T.; Christie, Peter A.; Jones, James R.

PA Armstrong Cork Co., USA

SO U.S., 6 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4115423	A	19780919	US 1976-723266	19760914

AB Products useful in the modification of aminoplasts are manufd. with less pollutant emission by reaction of metal halides with amides contg. $\text{gtoreq}2$ replaceable H atoms in water-immiscible inert liqs., hydrolyzing the reaction products, and partially neutralizing the aq. solns. with bicarbonates. Thus, adding 12.1 g TiCl_4 over 10-20 min to 45.6 g urea and 46 g C_6H_6 stirred at $\text{.1toreq}40$.degree., stirring 10 min, adding 31.7 g H_2O , and neutralizing the aq. layer with 10.6 g NaHCO_3 to pH <1.5 gives an aq. soln. of the reaction product. Adding 100 parts this soln. to 180 parts soln. prep'd. from melamine 22.5, urea 18.0, 37% HCHO 116.0, MeOH 14.3, and KNO_3 9.1 parts gives a cured resin [25036-13-9] with low shrinkage.

L4 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2000 ACS
AN 1977:34867 CAPLUS
DN 86:34867
TI Effect of steric factors in ligands on the ionization of titanium tetrachloride-ester complexes
AU Lysenko, Yu. A.; Khokhlova, L. I.; Vedmedskaya, A. N.
CS Donetsk. Politekh. Inst., Donetsk, USSR
SO Izv. Vyssh. Uchebn. Zaved., Khim. Khim. Tekhnol. (1976), 19(9), 1330-2
CODEN: IVUKAR
DT Journal
LA Russian
AB Migration studies in elec. fields of ions formed in solns. of TiCl_4 in $\text{HC}_2\text{O}_2\text{Pr}$, $\text{EtC}_2\text{O}_2\text{C}_9\text{H}_19$, and $\text{C}_7\text{H}_{15}\text{CO}_2\text{Et}$, and data previously obtained in TiCl_4 solns. in 11 other esters indicate that electron donor and geometric properties of the ligands affect the ionization of complexes of the form TiCl_4E and $\text{TiCl}_4\text{.2E}$ (E = ester). The ester complexes entered into the internal coordination sphere of the ions $[\text{TiCl}_3\text{.E}]^+$ and $[\text{TiCl}_3\text{.3E}]^+$ which were generated in trans-conformal form. With increasing length of the alkyl group, the equil. is displaced in the direction of forming $[\text{TiCl}_3\text{.E}]^+$ ions.

L4 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2000 ACS
AN 1976:413124 CAPLUS
DN 85:13124
TI Lewis base properties of platinum(0) complexes. III. Adducts between platinum and titanium tetrachloride
AU Plummer, J. F.; Schram, E. P.
CS Dep. Chem., Ohio State Univ., Columbus, Ohio, USA
SO Inorg. Chem. (1975), 14(7), 1505-12
CODEN: INOCAJ
DT Journal
LA English
AB The reactions of $\text{Pt}(\text{PPh}_3)_x$ ($x = 3, 4$) with TiCl_4 gave $(\text{TiCl}_4)_2\text{Pt}[\text{TiCl}_4(\text{PPh}_3)]_3$ (I). Thermolysis of I gave $\text{Pt}[\text{TiCl}_4(\text{PPh}_3)]_3$ (II). The reaction of I with PPh_3 or PMcPh_2 also gave II. Treatment of I with BCl_3 gave TiCl_4 ; subsequent thermolysis of the reaction residue results in the evolution of addnl. TiCl_4 , $\text{BCl}_3\text{-PPh}_3$, and $\text{Pt}[\text{TiCl}_4(\text{PPh}_3)]_2$.

L4 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2000 ACS
AN 1971:405161 CAPLUS
DN 75:5161
TI Ketene adducts with halides. I. Reaction of ketene with tin tetrachloride
AU Pavlov, V. I.; Koshkina, L. P.
CS USSR
SO Tr. Tol'yattinsk. Politekh. Inst. (1969), No. 1, 94-6
From: Ref. Zh., Khim. 1970, Abstr. No. 9zh503
DT Journal
LA Russian
AB Reaction of $\text{H}_2\text{C}=\text{C}: \text{O}$ (I) with SnCl_4 , BiBr_3 , and TiCl_4 gave stable adducts. I adducts of SnCl_4 and BiBr_3 have fluxing properties for soldering Al with other metals; the adduct of TiCl_4 is a catalyst for isoprene polymn.

L4 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2000 ACS
AN 1969:29566 CAPLUS
DN 70:29566
TI Catalytic ethylene polymerization
IN Kosaka, Yujiro; Ohara, Hyakumon; Shibata, Taizo; Fujita, Nobuhiro
PA Toyo Soda Manufg. Co., Ltd.
SO Japan., 4 pp.
CODEN: JAXXAD
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	JP 43015623	B4	19680701	JP	19640615	
AB	Polyethylene of d. 0.91-0.98 can be prep'd. by using a complex catalyst consisting of an adduct of TiCl ₄ with a compd. of the general formula MSR (where M is Na or K and SR is a mercapto radical) (mole ratio 0.05-4.0:1), a trialkyl Al compd., and a tetraalkoxy Ti compd. Thus, a mixt. of 6.0 millimoles n-Bu ₂ Na, 4.0 millimoles TiCl ₄ , and 250 ml. n-C ₇ H ₁₆ was stirred for 30 min. at 50.degree., then 18 millimoles iso-Bu ₃ Al and 3.0 millimoles Ti(OBu) ₄ were added and dild. to 300 ml. while stirring with n-C ₇ H ₁₆ . C ₂ H ₄ at 2.0 kg./cm. ² was polymd. during 3 hrs. at 60.degree., giving 100 g. polymer of d. 0.926 and intrinsic viscosity 11.9 dl./g. in Tetralin at 130.degree..					